Claims

1. An auxiliary scraper arrangement, intended for enhancing a scraping process performed by a scraper bar assembly in a liquid tank, such as in a settling tank or the like, reinforced at least in its bottom portion, such as provided with wall structures (sr) having a cross-section which includes one or more sections tapering upwards in a vertical direction (h), the object in this context being firstly the elimination of supernatant matter in the liquid tank by way of a first discharge arrangement (pk), such as a supernatant sludge launder or the like, and secondly the elimination of bottom matter in the liquid tank by way of a second discharge arrangement (pt), such as a bottom sludge pocket (pt) or the like, said scraper bar assembly comprising one or more scraper bars (1) in succession in a longitudinal direction (s) of the liquid tank, which are adapted to be operated by means of drive elements (2), such as one or more transmission chains (2b) or the like driven through the intermediary of a drive wheel and idle wheel assembly (2a) or in a like fashion, the scraper bar (1) being engaged in connection therewith, and said auxiliary scraper arrangement (X) comprising one or more substantially elongated extensions, providable on one or more scraper bars (1) and adapted to enhance a scraping process by being driven in response to actuators to two or more working positions essentially different from each other relative to the scraper bar (1) during its movement in the liquid tank, **characterized** in that actuators (X2) for driving an extension (X1) from one working position to another (I, II) are provided with a self-powered mechanism, whereby on the one hand the extension (X1) is connectable at an articulation point(N) pivotally (w) to the scraper bar (1), and on the other hand the extension (X1) has a counterweight (z) coupled

therewith on the opposite side of the articulation point(N) by way of a lever arm (y) for operating the extension (X1) gravitationally on a leverage principle from one working position to another (I, II), firstly for scraping the supernatant sludge present on the wall of the liquid tank while the scraper bar (1) is in a basic position on the surface of the liquid tank, and secondly for scraping the sludge present on an inclined surface (VP) at the bottom of the liquid tank while the scraper bar (1) is upside down on the bottom of the liquid tank.

2. An auxiliary scraper arrangement as set forth in claim 1, **characterized** in that the extension (X1) comprises a thin baffle, blade structure or the like manufactured in a plastic and/or metal material.

3. An auxiliary scraper arrangement as set forth in claim 1 or 2, engageable with a scraper bar assembly, the scraper bar (1) included therein being assembled from bar members (1a, 1b) engageable with each other most preferably in a dismountable manner, such as two first bar members (1a) engageable in a dismountable manner, such as by means of a screw connection (3) or the like, with the drive elements (2), such as two parallel transmission chains (2b), and from at least one second bar member (1b) coupled therebetween, which comprises an at least partially hollow box structure, such as a fiberglass column or the like, extending with a constant cross-section in a lengthwise direction (p) of the scraper bar (1), **characterized** in that the auxiliary scraper arrangement (X) is providable on the distal end of either or both first bar members (1a) of at least one liquid-surface working and one liquid-tank bottom working scraper bar (1).

4. An auxiliary scraper arrangement as set forth in claim 3, **characterized** in that the first bar member (1a) is provided with control elements (X3), such as guides and/or guards or the like, for controlling and/or limiting a movement of the counterweight (z).